**SoapUITraining- Rahul Shetty**

WSDL  
  
WSDL stands for Web Services Description Language  
WSDL is the standard format for describing a web service.  
WSDL is pronounced as 'wiz-dull' and spelled out as 'W-S-D-L'  
WSDL definition describes how to access a web service and what operations it will perform.  
WSDL is often used in combination with SOAP and XML Schema to provide web services over the Internet  
A client program connecting to a web service can read the WSDL to determine what functions are available on the server

WSDL is an XML document with a <definitions> element at the root and the child

elements,  
 <types>,  
 <message>,  
 <portType>  
 <binding>.

**Definition**: element must be the root element of all WSDL documents.   
 It defines the name of the web service,   
 The definitions element is a container of all the other elements..

**Types**:  
WSDL <types> element take care of defining the data types that are used by the web service.

WSDL allows the types to be defined in separate elements so that the types are reusable with multiple Web services.

**<Message**

The <message> element describes the data being exchanged between the Web service providers and consumers.  
Each Web Service has two messages: input and output.

**portType**

 <portType> can combine one request and one response message into a single request/response operation. This is most commonly used in SOAP services. A portType can define multiple operations.

**Binding**

The <binding> element provides specific details on how a portType operation will actually be transmitted over the wire.The bindings can be made available via multiple transports, including HTTP GET, HTTP POST, or SOAP

**Service:**

Web service clients can learn from the service element where to access the service, through which port to access the Web service, and how the communication messages are defined.